**Clean Set of Claims**

Sub H1

1. A system comprising:

an external non-dedicated memory including a plurality of memory banks;

a first agent having a single clock signal adapted to access a first memory portion including a first number of said plurality of memory banks; and

a second agent lacking a dedicated clock, receiving said memory access clock signal from said first agent, and having a clock signal representation of said first agent's clock signal adapted to access a second memory portion including a second number of said plurality of memory banks;

said first number and said second number being variable.

F1

7. A system comprising:

a plurality of agents;

an external non-dedicated shared memory block accessible by each of said plurality of agents, said external non-dedicated shared memory block including a plurality of memory banks;

a register adapted to partition said external non-dedicated shared memory block into a plurality of partitions each of said plurality of partitions being accessible by a unique group of said plurality of agents; and

said plurality of partitions each comprise a number of said plurality of memory banks;

wherein said plurality of agents, lacking a dedicated clock signal, receive a base clock signal from another agent and access said external non-dedicated shared memory block with clock signal representations of a base clock signal.

Sub H1

13. A system for providing access to shared external non-dedicated memory, said system comprising:

a first agent to provide a single memory access clock signal to allow said first agent to access said shared external non-dedicated memory; and

a second agent lacking a dedicated clock, receiving said single memory access clock signal from said first agent, to provide a representation of said single memory access clock signal to access said shared external non-dedicated memory in synchronism with said access by said first agent to said shared external non-dedicated memory;

wherein each of said first agent and said second agent may access different portions of said shared external non-dedicated memory simultaneously.

F1

17. A method of synchronizing access from a plurality of agents to external non-dedicated shared memory, comprising:

providing a single memory access clock signal;

providing a representation of said single memory access clock signal in synchronism with said single memory access clock signal;

firstly accessing a portion of said external non-dedicated shared memory from a first agent based on said single memory access clock signal;

secondly accessing a portion of said external non-dedicated shared memory from a second agent based on said representation of said single memory access clock signal received from said first agent;

wherein said step of secondly accessing said external non-dedicated shared memory follows said step of firstly accessing without a wait state therebetween.

Sub G1

18. The method of synchronizing access from a plurality of agents to shared memory according to claim 17, further comprising:

regenerating in said second agent said first memory access clock signal.

Sub G1

19. The method of synchronizing access from a plurality of agents to shared memory according to claim 17, wherein:

said first agent provides said first memory access clock signal.

F1

20. A method of partitioning an external non-dedicated shared memory, comprising:

setting a configuration register to partition said external non-dedicated shared memory into a first plurality of memory banks and a second plurality of memory banks;

accessing said first plurality of memory banks from a first agent;

accessing said second plurality of memory banks from a second agent; and

re-partitioning said external non-dedicated shared memory on-the-fly;

wherein said second agent lacks a dedicated clock and receives a clock signal representation of said first agent's clock signal for a second agent's access to said non-dedicated shared memory.

**Version with Markings to Show Changes Made**

1. (Four Times Amended) A system comprising:

an external non-dedicated memory including a plurality of memory banks;

a first agent having a single clock signal adapted to access a first memory portion including a first number of said plurality of memory banks; and

a second agent lacking a dedicated clock, receiving said memory access clock signal from said first agent, and having a clock signal representation of said first agent's clock signal adapted to access a second memory portion including a second number of said plurality of memory banks;

said first number and said second number being variable.

7. (Four Times Amended) A system comprising:

a plurality of agents;

an external non-dedicated shared memory block accessible by each of said plurality of agents, said external non-dedicated shared memory block including a plurality of memory banks;

a register adapted to partition said external non-dedicated shared memory block into a plurality of partitions each of said plurality of partitions being accessible by a unique group of said plurality of agents; and

said plurality of partitions each comprise a number of said plurality of memory banks;

wherein said plurality of agents, lacking a dedicated clock signal, receive a base clock signal from another agent and access said external non-dedicated shared memory block with [have] clock signal representations of a base clock signal.

13. (Four Times Amended) A system for providing access to shared external non-dedicated memory, said system comprising:

a first agent to provide a single memory access clock signal to allow said first agent to access said shared external non-dedicated memory; and

a second agent lacking a dedicated clock, receiving said single memory access clock signal from said first agent, to provide a representation of said single memory access clock signal to access said shared external non-dedicated memory in synchronism with said access by said first agent to said shared external non-dedicated memory;

wherein each of said first agent and said second agent may access different portions of said shared external non-dedicated memory simultaneously.

17. (Four Times Amended) A method of synchronizing access from a plurality of agents to external non-dedicated shared memory, comprising:

providing a single memory access clock signal;

providing a representation of said single memory access clock signal in synchronism with said single memory access clock signal;

firstly accessing a portion of said external non-dedicated shared memory from a first agent based on said single memory access clock signal;

secondly accessing a portion of said external non-dedicated shared memory from a second agent based on said representation of said single memory access clock signal received from said first agent;

wherein said step of secondly accessing said external non-dedicated shared memory follows said step of firstly accessing without a wait state therebetween.

18. (Amended) The method of synchronizing access from a plurality of agents to shared memory according to claim 17, further comprising:

regenerating in said second agent said first memory access clock signal.

19. (Amended) The method of synchronizing access from a plurality of agents to shared memory according to claim 17, wherein:

said first agent provides said first memory access clock signal.

20. (Three Times Amended) A method of partitioning an external non-dedicated shared memory, comprising:

setting a configuration register to partition said external non-dedicated shared memory into a first plurality of memory banks and a second plurality of memory banks;

accessing said first plurality of memory banks from a first agent;

accessing said second plurality of memory banks from a second agent; and

re-partitioning said external non-dedicated shared memory on-the-fly;

wherein said second agent lacks a dedicated clock and receives a clock signal representation of said first agent's clock signal for a second agent's access to said non-dedicated shared memory.